# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

CLEANUP AND ABATEMENT ORDER NO. R5-2006-0732

FOR

NANCY JACOBS, TRUSTEE, NANCY M. JACOBS REVOCABLE TRUST OF 2003, SHASTA SISKIYOU TRANSPORT, ALLEE OIL COMPANY, CONOCOPHILLIPS, AND CHEVRON-TEXACO RED BLUFF FORMER BULK PLANT TEHAMA COUNTY

This Order is issued to Nancy Jacobs, trustee, Nancy M. Jacobs Revocable Trust of 2003, Shasta Siskiyou Transport, Allee Oil Company, ConocoPhillips, and Chevron-Texaco (hereafter Dischargers) based on provisions of California Water Code (CWC) Section 13304, which authorizes the California Regional Water Quality Control Board, Central Valley Region (hereafter Regional Water Board) to issue a Cleanup and Abatement Order (Order), and CWC Section 13267, which authorizes the Regional Water Board to require preparation and submittal of technical and monitoring reports.

The Regional Water Board finds, with respect to the Dischargers' acts or failure to act, the following:

#### INTRODUCTION

- 1. The following three adjacent sites in south Red Bluff, Tehama County, are regulated under the Regional Water Board's Spill, Leaks, Investigation, and Cleanup (SLIC) program: Red Bluff Former Bulk Plant, Fisher Oil Bulk Plant (Fisher Oil), and Louisiana Pacific Red Bluff VG Mill and Jamb (Louisiana Pacific). These sites are presented in Attachment A, which is attached to this Order.
- 2. In-situ chemical oxidation is treating on-site pentachlorophenol at Louisiana Pacific, and corrective action is being developed for off-site petroleum and fuel oxygenates from Fisher Oil. Based on current Regional Water Board records, the Louisiana Pacific plume is contained on-site, but portions of the Red Bluff Former Bulk Plant plume and the Fisher Oil plume are commingled. This Order requires investigation and cleanup of the Red Bluff Former Bulk Plant.
- 3. The Red Bluff Former Bulk Plant was used as a petroleum bulk storage facility from approximately 1919 until approximately 1992. The site, which has been vacant since 2002, is on two adjoining parcels (APNs 033-190-02 and 033-190-10) totaling approximately 1.5 acres. Petroleum constituents have been consistently measured in the groundwater and shallow soils beneath the facility at concentrations exceeding water quality objectives (WQOs).

## PROPERTY OWNERSHIP AND OPERATORS

4. The Red Bluff Former Bulk Plant was first purchased for fuel-related use in 1919 when Associated Oil Company purchased it from Lola M. Andrews. Associated Oil Company

sold the facility in 1966 to Phillips Petroleum. During that time period, Associated Oil Company owned and operated the facility as a bulk plant. However, from 1919 to 1966, there were multiple mergers and acquisitions between Associated Oil Company, Southern Pacific Rail Corporation, Union Pacific Rail Road Corporation, Pacific Oil, Getty Oil, Tide Water Oil Company, and Tide Water Associated Oil Company. Chevron-Texaco is successor in interested to Associated Oil Company for the time period from 1932 until 1966. Union Pacific Railroad is a possible successor in interest to Associated Oil Company for the time period from 1919 until 1932.

- 5. Phillips Petroleum purchased the facility in 1966 from Associated Oil and sold it to Robert Allee in 1974. During that time period Phillips Petroleum owned and operated the facility. ConocoPhillips is successor in interest to Phillips Petroleum.
- 6. In 1976, Robert Allee purchased the facility from Phillips Petroleum. In 1992, Allee Oil Company transferred ownership of the Red Bluff Former Bulk Plant to Shasta Siskiyou Transport in repayment of a debt. During that time period Robert Allee and/or Allee Oil owned and operated the facility.
- 7. In 1992, Shasta Siskiyou Transport acquired the facility from Allee Oil Company as repayment for a debt. Shasta Siskiyou Transport never operated the facility. In 2002, Shasta Siskiyou Transport sold the Red Bluff Former Bulk Plant to the Jacobs; at the time of this sale, Shasta Siskiyou Transport provided environmental indemnity to the Jacobs. In a 2 August 2006 letter, Shasta Siskiyou Transport requested that their designation as a potential responsible party be reconsidered or that they be named a "secondarily responsible party."
- 8. The Red Bluff Former Bulk Plant is currently owned by Nancy M. Jacobs, trustee of the Nancy M. Jacobs Revocable Trust of 2003. She and her husband, Orville Jacobs, purchased the site from Shasta Siskiyou Transport on 2 April 2002. During an October 2003 Phase II site assessment of the Red Bluff Former Bulk Plant, petroleum pollution in soil and groundwater were discovered. The real property, which is now undeveloped, had not operated as a petroleum bulk plant during the Jacobs' ownership.
- 9. Ownership history is summarized in the following table.

	Year	Year	Years of	Possible
Original Owner	<b>Purchased</b>	Sold	Ownership	Successor in Interest
Associated Oil Company	1919	1966	47	Union Pacific Railroad (1919-1932) & Chevron-Texaco (1932-1966)
Phillips	1966	1974	8	ConocoPhillips
Robert and Mary Allee	1974	1981	7	Allee Oil Company
Allee Oil Company	1981	1992	11	Allee Oil Company
Shasta Siskiyou Transport	1992	2002	10	Shasta Siskiyou Transport
Orville and Nancy Jacobs	2002	2006	4	Nancy Jacobs

10. Nancy Jacobs, Shasta Siskiyou Transport, Allee Oil Company, ConocoPhillips, and Chevron-Texaco have been jointly named as responsible parties because they own the Red Bluff Former Bulk Plant, have owned the Red Bluff Former Bulk Plant, or are a successor in interest to a previous owner, and either caused the initial release of pollutants, and/or permitted the ongoing passive discharge with the knowledge of the discharge and the ability to control it. Based on current Regional Water Board record, Union Pacific Railroad is not named in this Order because no evidence indicates Associated Oil's ownership from 1919 to 1932 caused waste discharge. The Regional Water Board may amend this Order if new evidence identifies additional responsible parties for the waste.

## SITE BACKGROUND

- 11. The Red Bluff Former Bulk Plant operated historically as a petroleum bulk plant.

  Located at 545 South Main Street in Red Bluff, it is bound by the Southern Pacific
  Railroad to the southwest, Fisher Oil (an operating bulk plant) to the northwest and Main
  Street to the east.
- 12. Gasoline, diesel, and motor oil were stored and dispensed at the Former Bulk Plant from approximately 1919 until 1992. Fuel from outside vendors was delivered via larger tanker trucks and transferred to on-site above ground storage tanks (ASTs). From the ASTs, facility operators would transfer fuel to smaller trucks for delivery to local farms, logging sites, and construction sites.
- 13. In addition to two loading racks and three or four dispensers, there were three 20,000-gallon ASTs, one 12,000-gallon AST, and one 10,000-AST. The ASTs held gasoline, diesel, and kerosene; motor oil was stored in barrels. Underground piping connected several of the dispensers with the loading racks. Remaining piping was above ground. The historic layout of the facility is presented in Attachment B, which is attached to this Order.
- 14. Shasta Siskiyou Transport removed the ASTs in 1994. In a 17 July 2006 meeting with Regional Water Board staff, Nancy Jacobs, Allee Oil Company, ConocoPhillips, and Chevron-Texaco, Shasta Siskiyou Transport stated that they do not recall who performed the AST removal, where the tanks were disposed, or any subsurface conditions observed during the removal. During that same meeting, Allee Oil stated Allee Oil drained the tanks before transferring property ownership to Shasta Siskiyou Transport.
- 15. Beller Equipment, who obtained a permit from the City of Red Bluff in November 2003 to demolish an oil shed at the facility, described the following to Regional Water Board staff in a phone conversation on 9 August 2006: In addition to removing the shed, Beller Equipment was hired by Shasta Siskiyou Transport to remove the ASTs, the concrete saddles that held the larger tanks, and the above ground piping. Before Beller

Equipment arrived on-site, all fuel was drained from the tanks. During the demolition, there were fuel odors and fuel staining on the soils, typical of similar bulk plants. No soils were removed off-site. The piping was scraped and the tanks were sold to and removed by a farmer.

16. The remaining buildings were removed by Shasta Siskiyou Transport and/or the Jacobs by 2002. The Red Bluff Former Bulk Plant is presently vacant.

## SUBSURFACE CONDITIONS

- 17. In 22 October 2003, five test pits were dug and two soil samples were collected based on visual observations and odors. Total petroleum hydrocarbons (TPH)-diesel was measured in soil from 380 to 2500 mg/kg.
- 18. In 9 December 2003, five borings were advanced and groundwater was encountered at 34 feet below ground surface (ft bgs). Maximum soil and groundwater results are provided in the table below:

Constituent	Maximum Soil Concentration (mg/kg)	Maximum Groundwater Concentration (ug/L)
TPH-gasoline	0.91	170,000
TPH-diesel	5200	Not Detected
Benzene	0.050	52,000
Toluene	0.0043	62,000
Ethylbenzene	18,000	4,300
Xylenes	36,000	20,000
Fuel oxygenates	Not Detected	Not Detected

milligrams per kilogram (mg/kg), micrograms per liter (ug/L)

19. In 26 and 27 July 2004, three on-site groundwater wells were installed. Based on water levels measured in these wells, groundwater generally flows towards the northeast. The wells were sampled in September 2004, December 2004, and March 2005; petroleum groundwater concentrations are summarized in the table below:

Constituent	MW-1	MW-2	MW-3
TPH-gasoline (ug/L)	87,000 to 130,000	Not Detected	160,000 to 470,000
TPH-diesel (ug/L)	Not Detected	Not Detected	Not Detected
Benzene (ug/L)	29,000 to 64,000	Not Detected	98,000 to 170,000
Toluene (ug/L)	26,000 to 51,000	Not Detected	38,000 to 200,000
Ethylbenzene (ug/L)	2,200 to 2,900	Not Detected	3,300 to 8,600
Xylenes (ug/L)	12,000 to 17,000	Not Detected	18,000 to 50,000
Fuel oxygenates (ug/L)	Not Detected	Not Detected	Not Detected

## REGULATORY COMPLIANCE HISTORY

- 20. In a 16 November 2004 staff enforcement letter, Regional Water Board staff stated that the extent of waste at the Red Bluff Former Bulk Plant had not been fully delineated and requested the Jacobs submit a work plan for further investigation and corrective action by 28 January 2005. No such work plan was received.
- 21. Pursuant to CWC Section 13267, on 6 June 2006 the Regional Water Board ordered Nancy Jacobs, Shasta Siskiyou Transport, Allee Oil Company, ConocoPhillips, and Chevron-Texaco to submit a work plan by 31 August 2006 to delineate the horizontal and vertical extent of soil, soil vapor, and groundwater pollution extending from the Red Bluff Former Bulk Plant, and to evaluate potential corrective actions. The requested work plan was received on 1 September 2006. The work plan recommended installing 14 to 20 borings; collecting soil, soil vapor, and groundwater samples; and analyzing these samples at on on-site mobile laboratory. The work plan also recommended collecting free product samples for fingerprinting and age-dating analysis, and soil samples for soil properties testing. Regional Water Board staff stated in a 22 September 2006 comment letter that they had no objections to the overall scope of the work plan but suggested additional decision-making criteria be developed prior before fieldwork to maximize the benefits of the on-site laboratory.

#### **AUTHORITY – LEGAL REQUIREMENTS**

# 22. Section 13304(a) of the CWC provides that:

"Any person who has discharged or discharges waste into waters of the state in violation of any waste discharge requirements or other order or prohibition issued by a regional board or the state board, or who has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and creates, or threatens to create, a condition of pollution or nuisance, shall upon order of the regional board clean up the waste or abate the effects of the waste, or, in the case of threatened pollution or nuisance, take other necessary remedial action, including but not limited to, overseeing cleanup and abatement efforts. A cleanup and abatement order issued by the state board or a regional board may require the provision of, or payment for, uninterrupted replacement water service, which may include wellhead treatment, to each affected public water supplier or private well owner. Upon failure of any person to comply with the cleanup or abatement order, the Attorney General, at the request of the regional board, shall petition the superior court for that county for the issuance of an injunction requiring the person to comply with the order. In the suit, the court shall have jurisdiction to grant a prohibitory or mandatory injunction, either preliminary or permanent, as the facts may warrant."

## 23. Section 13304(f) of the CWC provides that:

"Replacement water provided pursuant to subdivision (a) shall meet all applicable federal, state and local drinking water standards and shall have comparable quality to that pumped by the public water system or private well owner prior to the discharge of waste"

# 24. Section 13267(b)(1) of the CWC provides that:

"In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports."

# 25. Section 13304(c)(1) of the CWC provides that:

"If waste is cleaned up or the effects of the waste are abated, or, in the case of threatened pollution or nuisance, other necessary remedial action is taken by any government agency, the person or persons who discharged the waste, discharges the waste, or threatened to cause or permit the discharge of the waste within the meaning of subdivision (a), are liable to that government agency to the extent of the reasonable costs actually incurred in cleaning up the waste, abating the effects of the waste, supervising cleanup or abatement activities, or taking other remedial actions..."

- 26. The State Water Resources Control Board (hereafter State Water Board) has adopted Resolution No. 92-49, the *Policies and Procedures for Investigation and Cleanup and* Abatement of Discharges Under Water Code Section 13304. This Policy sets forth the policies and procedures to be used during an investigation or cleanup of a polluted site and requires that cleanup levels be consistent with State Water Board Resolution 68-16, the Statement of Policy With Respect to Maintaining High Quality of Waters in California. Resolution 92-49 and the Basin Plan establish the cleanup levels to be achieved. Resolution 92-49 requires the waste to be cleaned up to background, or if that is not reasonable, to an alternative level that is the most stringent level that is economically and technologically feasible in accordance with Title 23, California Code of Regulations (CCR) Section 2550.4. Any alternative cleanup level to background must (1) be consistent with the maximum benefit to the people of the state; (2) not unreasonably affect present and anticipated beneficial use of such water; and (3) not result in water quality less than that prescribed in the Basin Plan and applicable Water Quality Control Plans and Policies of the State Water Board.
- 27. Chapter IV of the Basin Plan contains the *Policy for Investigation and Cleanup of Contaminated Sites*, which sets forth the Regional Water Board's policy for managing contaminated sites. This policy is based on CWC Sections 13000 and 13304; Title 23 CCR, Division 3, Chapter 15; Title 27, Division 2, Subdivision 1 regulations; and State Water Board Resolution Nos. 68-16 and 92-49. The policy includes site investigation, source removal or containment, information required to be submitted for consideration in establishing cleanup levels, and the bases for establishment of soil and groundwater cleanup levels.

- 28. The State Water Board adopted the *Water Quality Enforcement Policy*, which states in part:
  - "At a minimum, cleanup levels must be sufficiently stringent to fully support beneficial uses, unless the RWQCB allows a containment zone. In the interim, and if restoration of background water quality cannot be achieved, the CAO should require the discharger(s) to abate the effects of the discharge. Abatement activities may include the provision of alternate water supplies." (Enforcement Policy, p. 19.)
- 29. The Regional Water Board's *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, 4<sup>th</sup>* Edition (hereafter Basin Plan) designates beneficial uses of the waters of the State, establishes WQOs to protect these uses, and establishes implementation policies to implement WQOs. The designated beneficial uses of the groundwater beneath the site are domestic, municipal, industrial, and agricultural supply.
- 30. The petroleum hydrocarbon wastes detected at the site are not naturally occurring, and some are known human carcinogens. These wastes impair or threaten to impair the beneficial uses of the groundwater.
- 31. WQOs listed in the Basin Plan include numeric WQOs, e.g., state drinking water maximum contaminant levels (MCLs), and narrative WQOs, including the narrative toxicity objective and the narrative tastes and odors objective for surface and groundwater. Chapter IV of the Basin Plan contains the *Policy for Application of Water Quality Objectives*, which provides that "[w]here compliance with narrative objectives is required (i.e., where the objectives are applicable to protect specified beneficial uses), the Regional Water Board will, on a case-by-case basis, adopt numerical limitations in orders which will implement the narrative objectives." Testing of petroleum hydrocarbons has identified a number of constituents that are not present in groundwater unaffected by the discharge and that could exceed a narrative WQO. All of these are constituents of concern. The numerical limits for the constituents of concern listed in the following table implement the Basin Plan WQOs.

Constituent	Limits (ug/L)	WQO	Reference	
TPH-gasoline	5	Taste and Odor	McKee & Wolf, Water Quality Criteria,	
		Taste and Odoi	SWRCB, p. 230	
Benzene	0.15	Toxicity	California Public Health Goal	
Toluene	42	Taste and Odor	Federal Register, Vol. 54, No. 97	
Ethylbenzene	29	Taste and Odor	Federal Register, Vol. 54, No. 97	
Xylene	17	Taste and Odor	Federal Register, Vol. 54, No. 97	

- 32. The constituents listed in Findings 17 and 18 are wastes as defined in CWC Section 13050(d). The groundwater exceeds the WQOs for the constituents listed in Finding No. 31. TPH-gasoline, benzene, toluene, ethylbenzene, and xylenes all exceed related numerical limits. The exceedance of applicable WQOs in the Basin Plan constitutes pollution as defined in CWC Section 13050(l)(1).
- 33. The constituents listed in Finding No. 33 are present in groundwater due to the disposal of wastes from the site, are injurious to health or impart objectionable taste and odor

when present in drinking water, and affect a considerable number of persons. As such, a condition of nuisance is created, as defined in CWC Section 13050(m).

### **DISCHARGER LIABILITY**

- 34. As described in Finding 10, the Dischargers are subject to an order pursuant to CWC Section 13304 because the Dischargers have caused or permitted waste to be discharged or deposited where it has discharged to waters of the state and has created, and continues to threaten to create, a condition of pollution or nuisance. The condition of pollution is a priority violation and issuance or adoption of a cleanup or abatement order pursuant to CWC Section 13304 is appropriate and consistent with policies of the State Water Board.
- 35. This Order requires investigation and cleanup of the site in compliance with the CWC, the applicable Basin Plan, Resolution 92-49, and other applicable plans, policies, and regulations.
- 36. As described in Findings 4 to 21, the Dischargers are subject to an order pursuant to CWC Section 13267 to submit technical reports because existing data and information about the site indicate that waste has been discharged, is discharging, or is suspected of discharging, at the Red Bluff Former Bulk Plant, which is or was owned and/or operated by the Dischargers named in this Order or by an entity to which the Dischargers are a successor in interest. The technical reports required by this Order are necessary to assure compliance with Section 13304 of the CWC, including to adequately investigate and clean up the site to protect the beneficial uses of waters of the state, to protect against nuisance, and to protect human health and the environment.
- 37. If the Dischargers fail to comply with this Order, the Executive Officer may request the Attorney General to petition the superior court for the issuance of an injunction.
- 38. If the Dischargers violate this Order, the Dischargers may be liable civilly in a monetary amount provided by the CWC.
- 39. The issuance of this Order is an enforcement action taken by a regulatory agency and is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000, et seq.), pursuant to Title 14 CCR Section 15321(a)(2). The implementation of this Order is also an action to assure the restoration of the environment and is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000, et seq.), in accordance with Title 14 CCR, Sections 15308 and 15330.
- 40. Any person affected by this action of the Regional Water Board may petition the State Water Board to review the action in accordance with Title 23 CCR Sections 2050-2068. The regulations may be provided upon request and are available at www.swrcb.ca.gov. The State Water Board must receive the petition within 30 days of the date of this Order.

## **REQUIRED ACTIONS**

**IT IS HEREBY ORDERED** that, pursuant to California Water Code Division 7, including Section 13304 and Section 13267, Nancy Jacobs, Shasta Siskiyou Transport, Allee Oil Company, ConocoPhillips, and Chevron-Texaco (hereafter Dischargers) shall:

Further investigate the discharges of waste, clean up the waste, and abate the effects of such waste, forthwith, resulting from activities at Assessor's Parcel Number 033-190-02 and 033-190-10 and 545 South Main Street, Red Bluff, Tehama County, in conformance with State Water Board Resolution No. 92-49 *Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304* and with the Regional Water Board's *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins* (in particular the Policies and Plans listed within the Control Action Considerations portion of Chapter IV), other applicable state and local laws, and consistent with Health and Safety Code, Division 20, Chapter 6.8. "Forthwith" means as soon as is reasonably possible.

All work and reports shall follow the *Appendix A - Reports, Tri-Regional Recommendations for Preliminary Investigation* and *Evaluation of Underground Storage Tank Site* (which may be found at http://www.waterboards.ca.gov/centralvalley/available\_documents) and under permits required by State.

- 1. Submit, by 15 January 2007, a Revised Site Investigation Work Plan (Work Plan), that includes a time schedule, to collect a sufficient number of soil, soil vapor and groundwater samples to determine the lateral and vertical extent of waste constituents, including but limited to, TPH-gasoline, benzene, toluene, ethylbenzene, xylenes, fuel oxygenates, organic lead, and lead scavengers for complete site characterization. The Work Plan shall contain the information in Appendix A Reports, Tri-Regional Recommendations for Preliminary Investigation and Evaluation of Underground Storage Tank Site. This Work Plan shall incorporate comments provided in Regional Water Board staff letter dated 19 September 2006, and shall be sufficient in scope to generate by 30 October 2007 an appropriate plan for remedial action. Implement the Work Plan according to the time schedule.
- 2. Conduct, by 15 January 2007, an Off-Site Property Owner Survey (Survey) to facilitate the Regional Water Board's duty to notify landowners of property where constituents from a release are present and to provide opportunity for public comment on the site cleanup process. Conduct the Survey by obtaining the property owner names and mailing addresses, the mailing addresses of all business and residences on the properties, and assessors' parcel numbers for all properties overlying soil and groundwater where constituents from the release are present and all properties adjacent to parcels where constituents from the release are present. Submit data in a table or spreadsheet. Include assessor's parcel maps for the properties and a map depicting the extent of impacted groundwater. Upon Regional Water Board request, follow-up tasks may include, but are not limited to, mailing of appropriate fact sheets to interested parties and coordinating public meetings.
- 3. Submit, by 30 October 2007, a draft remedial action plan (RAP) based on findings of

the site investigation that evaluates remedial alternatives that have a substantial likelihood to achieve cleanup of all impacted soils and groundwater. The remedial alternatives must be evaluated with respect to implementability, cost, and effectiveness. The draft RAP shall include the rationale for selecting the preferred remedial alternative and a schedule for achieving cleanup. The draft RAP shall also include a certification statement that the proposed remedial alternative will not form a subsurface waste and thereby will not create a condition of pollution or nuisance as defined in CWC Section 13304(a). The draft RAP shall also certify that proposed cleanup methods adequately protect identified sensitive receptors and will cost- effectively clean up waste to the maximum extent feasible to meet numerical WQOs.

- 4. Upon Regional Water Board staff approval, submit the draft RAP for a **30-day public comment period**. Coordinate with Regional Water Board staff on appropriate public noticing, maintenance of publicly available documents, and comment management.
- 5. Submit, **by 31 January 2008**, a Final Remediation Plan (FRP) for total cleanup with a time schedule for implementation on all affected properties. Implement the FRP according to the time schedule. The FRP should include, but is not limited to detailed designs and technical support for all proposed treatments, monitoring, and associated waste treatment and discharge.
- 6. **Within 60 days** of Regional Water Board staff's approval of the FRP **but no later than 30 May 2008**, begin implementation of the approved remedial actions and complete implementation in compliance with the time schedule.
- 7. Submit for remediation system(s), Monthly Status Reports for the first three months of operation of any new systems. At a minimum, the monthly status reports shall include:
  - site maps indicating the capture zone and waste plumes,
  - average extraction rates of all treatment systems,
  - influent and effluent concentrations of TPH-gasoline, benzene, toluene, ethylbenzene, xylenes, and fuel oxygenates, appropriate lead scavengers, and organic lead
  - mass of hydrocarbons treated during the reporting period and cumulative to date,
  - estimated mass of wastes remaining and predicted time frame for meeting cleanup objectives,
  - running and down time for the remediation system(s),
  - summary of consultant visits to the site, and evaluation of the overall remediation program and recommendations to correct deficiencies or increase efficiency.
- 8. The Dischargers shall ensure that cleanup methods cause no further migration of the

waste constituents in groundwater. If monthly or quarterly sampling results indicate further migration of petroleum waste constituents beyond the treatment volume, the Dischargers shall include **with the second status report** a proposal to correct the condition. The proposed actions shall be completed **within 60 days** of staff approval of the proposal

- 9. Monitor and sample quarterly all monitoring wells for TPH-gasoline, benzene, toluene, ethyl benzene, xylenes, fuel oxygenates, dissolved oxygen, oxidation-reduction potential, pH, iron II, nitrate, sulfate, and methane until otherwise directed in writing by the Executive Officer or his/her representative(s). Method Detection Limits (MDLs) shall be derived by the laboratory for each analytical procedure, according to State of California laboratory accreditation procedures. The MDLs shall reflect the detection capabilities of the specific analytical procedure and equipment used by the lab, rather than simply being quoted from United States Environmental Protection Agency (USEPA) analytical method manuals. In relatively interference-free water, laboratory-derived MDLs are expected to closely agree with published USEPA MDLs.
- 10. Coordinate quarterly groundwater sampling events with neighboring facilities, Louisiana Pacific and Fisher Oil, to facilitate the collection of compatible groundwater monitoring data, particularly water level measurements.
- 11. Submit **Quarterly Status** Reports by the 1<sup>st</sup> day of the second month after the calendar quarter in which the samples were collected. The first quarter report is due **1 May**, the second quarter report is due **1 August**, the third quarter report is due **1 November**, and the fourth quarter report is due **1 February**. Quarterly reports are to include the information specified in *Appendix A Reports, Tri-Regional Recommendations for Preliminary Investigation* and *Evaluation of Underground Storage Tank Site*. Regional Water Board staff will review Quarterly Status Reports for adequacy relative to further site investigation and cleanup. Based on such reviews, the Regional Water Board Executive Officer may, at his/her discretion, issue additional site-specific monitoring and reporting requirements, which would become part of this Order.

# **GENERAL REQUIREMENTS**

- 12. The Dischargers shall continue to reimburse the Regional Water Board for reasonable costs associated with oversight of the cleanup of this Red Bluff Former Bulk Plant. Statements of oversight costs will be sent to each of the parties named in this Order. Each party named in this Order is jointly and severally responsible that the full amount is paid. The parties may agree to apportion the amount as they see appropriate. Failure to reimburse the Regional Water Board's reasonable oversight costs shall be considered a violation of this Order. If payment in full is not received by the due date, the State Water Board will enforce its cost recovery against any and all of the parties named in this Order.
- 13. Submit all reports, including quarterly monitoring reports, with a cover letter signed by all parties named in this Order. Any designations of signature authority (authorized

representative) shall be provided in writing prior to report submittal.

- 14. All technical reports submitted by the Dischargers shall include a statement signed by the authorized representative(s) certifying under penalty of law that the representative has examined and is familiar with the report and that to his knowledge, the report is true, complete, and accurate. The authorized representative(s) shall also state if they agree with any recommendations/proposals and whether they approved implementation.
- 15. As required by the California Business and Professions Code Sections 6735, 7835, and 7835.1, have appropriate reports prepared by, or under the supervision of, a registered professional engineer or geologist and signed by the registered professional. All technical reports submitted shall include a cover letter signed by <a href="each">each</a> Discharger, or authorized representatives, certifying under penalty of law that the signers have examined and are familiar with the report and that to their knowledge, the report is true, complete, and accurate. The Dischargers shall also state if they agree with any recommendations/ proposals and whether they approved implementation of said proposals.
- 16. Upon startup of any remediation system(s), operate the remediation system(s) continuously, except for periodic and required maintenance or unpreventable equipment failure. The Dischargers shall notify the Water Board within 24 hours of any unscheduled shutdown of the remediation system(s) that lasts longer than 48 hours. This notification shall include the cause of the shutdown and the corrective action taken (or proposed to be taken) to restart the system. Any interruptions in the operation of the remediation system(s), other than for maintenance, emergencies, or equipment failure, without prior approval from Regional Water Board staff or without notifying the Regional Water Board within the specified time is a violation of this Order. Within 7 working days of a shutdown, the Dischargers shall submit a Technical Report containing at a minimum, but not limited to the following information:
  - times and dates equipment were not working,
  - cause of shutdown,
  - if not already restarted, a time schedule for restarting the equipment, and.
  - a Cleanup Assurance Plan to ensure that similar shutdowns do not reoccur. Proposed Cleanup Assurance Plans are to be completed within 30 days of the system shutdown.
- 17. Notify Regional Water Board staff at least three working days prior to any onsite work, testing, or sampling that pertains to environmental remediation and investigation and is not routine monitoring, maintenance, or inspection.
- 18. Obtain all local and state permits and access agreements necessary to fulfill the requirements of this Order prior to beginning the work.

- 19. Continue any remediation or monitoring activities until such time as the Executive Officer determines that sufficient cleanup has been accomplished to fully comply with this Order and this Order has been either amended or rescinded in writing.
- 20. Optimize remedial systems as needed to improve system efficiency, operating time, and/or waste removal rates, and report on the effectiveness of the optimization in the quarterly reports.
- 21. Maintain a sufficient number of monitoring wells to completely define and encompass the waste plume(s). If groundwater monitoring indicates the waste in groundwater has migrated beyond laterally or vertically defined limits during the quarter, then the quarterly monitoring reports must include a work plan and schedule, with work to begin within thirty days of Regional Water Board staff approval, to define the new plume limits.
- 22. Submit all written reports and analytical results to the Regional Water Board and electronic copies of all reports and analytical results over the Internet to the State Water Board Geographic Environmental Information Management System database (GeoTracker) at <a href="http://geotracker.swrcb.ca.gov">http://geotracker.swrcb.ca.gov</a>. Electronic submittals shall comply with GeoTracker standards and procedures as specified on the State Water Board's web site.
- 23. If the Dischargers are unable to perform any activity or submit any document in compliance with the schedule set forth herein, or in compliance with any work schedule submitted pursuant to this Order and approved by the Executive Officer, the Dischargers may request, in writing, an extension of the time specified. The extension request shall include justification for the delay. Any extension request shall be submitted as soon as the situation is recognized and no later than the compliance date. An extension may be granted by revision of this Order or by a letter from the Executive Officer. Extension requests not approved in writing by the Executive Officer will be denied.
- 24. All work and directives referenced in this Order are required regardless of whether or not the UST Cleanup Fund approves the work for reimbursement.
- 25. If, in the opinion of the Executive Officer, the Dischargers fail to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement or may issue a complaint for administrative civil liability.

This Order is effective upon the date of signature.

Original Signed By James C. Pedri PAMELA C. CREEDON, Executive Officer

21 November 2006

Date

MEWB: sae

21 November 2006

Attachment A – Site Location Attachment B – Facility Map

Admin2CAO-Red Bluff FBP